REMARKS

Claims 1-40 are pending in the application. Claims 1-40 stand rejected under 35 U.S.C. § 101 for being directed towards non-statutory subject matter.

Claims 1, 13, and 29-36 stand rejected under 35 U.S.C. § 112 for failing to comply with the written description requirement. Claims 1, 13, and 29-36 stand rejected under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-14, 16-23, 25-27, 29-36, and 38-40 stand rejected under 35 U.S.C. § 102(e) as being anticipated by United States Publication No. 20030229707 to Sharon *et al.* (hereinafter "Sharon"). Claims 15, 24, 28, and 37 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Sharon as applied to claims 13, 18, and 29, and further in view of United States Patent No. 6839825 to Brown (hereinafter "Brown").

Paragraph 0050 of the specification is amended to include a statement regarding a "computer readable storage medium." This amendment is not new matter because computer readable storage medium is contained in the originally filed claims. *See* Claims 29-39. Information contained in any one of the specification, claims, or drawings of the application as filed may be added to any other part of the application without introducing new matter. *See* MPEP § 2163.06.

Claims 1, 13, 17, 18, and 26 have been amended to further clarify the invention. Claims 16, 23, and 25 have been cancelled because their limitations have been amended into their respective independent claims.

REJECTIONS

Claims Rejections under 35 U.S.C. § 101

Claims 1-40 are rejected under 35 U.S.C. § 101 for claiming non-statutory subject matter. Applicants disagree.

Only when the claim is devoid of any limitation to a practical application in the technological arts should it be rejected under 35 U.S.C. 101. Compare *Musgrave*, 431 F.2d at 893, 167 USPQ at 289; *In re Foster*, 438 F.2d 1011, 1013, 169 USPQ 99, 101 (CCPA 1971).

Applicants assert that the Office Action fails to consider the claims in view of the entire specification. The guidelines set forth in the MPEP require that the Examiner first determine what applicant has invented and is seeking to patent, second identify and understand any practical application asserted for the invention, third review the detailed disclosure and specific embodiments of the invention to determine what the applicant has invented, and fourth review the claims. *See* MPEP § 2106. A review of Applicants detailed disclosure contains several examples of useful, concrete, and tangible results.

For example, the specification states that the source and the target include CPU's, electronic memory modules, communication interfaces, and various modules. *See* Para. 0050. Certainly CPU's and electronic memory modules, which store data and metadata, are concrete and tangible devices. The source may be configured to send data to the target and likewise the target is configured to receive the data. *See* specification, paragraph 0051.

Regarding independent Claim 1, Applicants submit that the claim does indeed convey at least one real world application. The preamble of amended Claim 1 recites, in pertinent part (emphasis added):

A self-descriptive binary data structure stored on a computer readable storage medium **for communicating binary data**...*See* Claim 1.

The transmission or communication of data is a measurable process and therefore very tangible. Furthermore, the transmission of data is a useful process, and in the embodiment of Claim 1, produces a real world result, the result being the transmission of a binary data structure between a source device and a target device.

In responding to Applicants arguments of 8/25/2006, the Examiner asks "what part of claim 1 is producing [sp.] real world result?" And, "what is the practical use?" Applicants direct the Examiner to review the specification which describes how the data structure may perform an upgrade on the target device. *See* paragraph 0052 (stating that the data structure may comprise a microcode reconstruct and boot image, or in other terms a data structure configured to upgrade the microcode of the target) and 0038-0039.

Additionally, specific terms within claim 1 that are a real world result are a "segment header descriptive of the corresponding data segment; and a "structure descriptor identifying the location of the target data set within the data field." A header descriptive of a data segment is a real world result. So is identifying the location of a target data set.

Applicants assert, therefore, that Claim 1 is improperly rejected under 35 U.S.C. § 101. Likewise, the rejection of Claims 2-12 under 35 U.S.C. § 101 is improper at least for the reasons stated above and for depending from independent Claim 1.

The rejection of independent Claim 13 under 35 U.S.C. § 101 is not directed toward an "abstract idea." It is unclear to the applicants how source and target devices configured to communicate via communication channels are considered abstract. The specification clearly

describes the source and target devices as comprising CPU's, memory, and communication devices. *See* Figure 6. Furthermore, amended Claim 13 recites, in pertinent part, "..the target communication device is configured to process an executable, the executable stored in the ... data structure." *See* Claim 13. The executable, in one given example, may include a microcode reboot image for updating the target device. *See* Para. 0037 - 0039. Rebooting and updating a machine produce a real world and tangible result; in fact a result that can be heard as the machine or device shuts down and is restarted.

As such, Applicants submit that the rejection of Claim 13 under 35 U.S.C. § 101 is improper, as is the rejection of the dependent Claims 14-17   Claims 18, 29, and 40 include limitations similar to claims 1 and 13 and are allowable for the reasons described above and for the reasons described in the response of 8/25/2006.

Claim Rejections under 35 U.S.C. § 112

Claims 1, 13, and 29-36 stand rejected under 35 U.S.C. § 112, as failing to comply with the written description requirement. Specifically, the Office Action states that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors had possession of the claimed invention. The term "computer readable storage medium" appears to be the source of this confusion. The Examiner states "…'computer readable storage medium' is not defined, described."

Applicants have amended the specification to include the term "computer readable storage medium." Specifically, paragraph 0050 of the specification is amended to include a statement regarding a "computer readable storage medium." This amendment is not new matter because

computer readable storage medium is contained in the originally filed claims. *See* Claims 29-39. Information contained in any one of the specification, claims, or drawings of the application as filed may be added to any other part of the application without introducing new matter. *See* MPEP § 2163.06.

As such, Applicants respectfully request the removal of the rejection under 35 U.S.C. § 112 with regard to Claims 1, 13, and 29-36.

Claim Rejections under 35 U.S.C. § 102(e)

Claims 1-14, 16-23, 25-27, 29-36, and 38-40 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Sharon. Applicants respectfully disagree.

Previously, Applicants essentially argued that Sharon does not anticipate the claimed invention because Sharon does not teach binary data structures having the elements as claimed and therefore could not teach the transfer of such data structures. In fact, Sharon discuses how his invention benefits from not being binary. *See* Sharon, Para. 0013, line 5. The Examiner responded by stating "[e]ach byte of binary data is encoded as a 2-character hexadecimal number: the first ASCII character representing the high-order 4 bits, and the second the low order 4 bits of the byte." The Examiner then refers to Sharon, page 2, col.1, 0020. A review of paragraph 0020 reveals that the word binary is not mentioned. In fact, the word binary is only found in paragraph 0013 when Sharon discusses the benefit of not needing binary protocols, and paragraph 0024 when Sharon discusses CRC vs. checksum.

Conversely, the claimed data structure is a true binary image, and as such, no conversion from ASCII characters is required prior to transmission. A conversion from s-records beneficially

enables interfacing with older generation hardware that uses s-records and s-record images. *See* Para. 0063. As claimed, the self-descriptive binary data structure includes various features not mentioned by Sharon. These features include, but are not limited to a plurality of data segments where each data segment comprises a header and a data field, and a target data set within the data field.

As such, Applicants submit that the rejection based on 35 U.S.C. § 102(e) has been improperly asserted. Applicants, therefore, request the removal of the rejection under 35 U.S.C. § 102(e) with respect to Claims 1-14, 16-23, 25-27, 29-36, and 38-40.

Claims Rejection under 35 U.S.C. § 103

Claims 15, 24, 28, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharon as applied to claim 13, 18, and 29, and further in view of Brown. Applicants respectfully disagree.

Applicants previously argued that *prima facie* obviousness had not been established because both Brown and Sharon do not teach binary data structures. The Examiner replied that both Sharon and Brown teach "binary data structure [see Sharon: page 2, col 2, 0021, fig 2-3; Brown: col 2, line 33-35], and both Sharon Brown suggests embedded memory systems." Applicants disagree. Sharon in paragraph 0021 and Figure 3 describes the iAN files that are clearly not true binary data structures. As described above, Sharon mentions the term "binary" only in paragraphs 0013 and 0024.

While Brown does mention converting a segmented non-binary width data structure into a binary memory structure (*See* Brown, col. 2, lines 1-2), Sharon, conversely, makes no mention of binary data. The combination of Sharon and Brown, therefore, does not result in any of the claimed

limitations of the present invention. Applicants submit therefore, that the rejection of Claims 13, 18, and 29 is improper and that the rejection should be removed.

CONCLUSION

As a result of the presented remarks and amendments, Applicants assert that Claims 1-40 are patentable and in condition for prompt allowance. Should additional information be required, Examiner is respectfully asked to notify Applicants of such need. If any impediments to the prompt allowance of the claims can be resolved by a telephone conversation, the Examiner is respectfully requested to contact the undersigned.

Respectfully submitted,

Date: December 19, 2006   /Brian C. Kunzler/

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